

Notice of Allowability

Application No.

10/648,271

Examiner

Laura S. Weiner

Applicant(s)

INATOMI ET AL.

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 4-30-07.
2. ☒ The allowed claim(s) is/are 8, 14-20, 23 and 28-30.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>20070723</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Nat McQueen on July 23, 2007.

The application has been amended as follows:

IN THE CLAIMS

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Please substitute this claim 30 for the present claim 30.

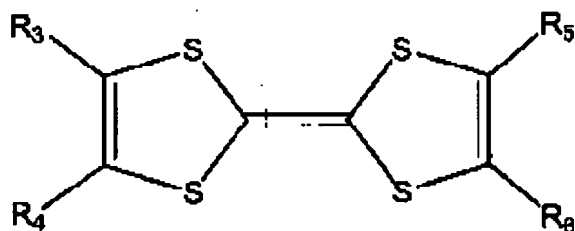


30. (Currently amended) An electrochemical device comprising a positive electrode, a negative electrode and an electrolyte, wherein

at least one of said positive and negative electrodes comprises a compound having a structure represented by any of the general formula (1):

~~where R^1 and R^2 are independent of each other and each represents a linear or cyclic aliphatic group; X^1 , X^2 , X^3 and X^4 are independent of each other and each represents a sulfur atom, an oxygen atom, a selenium atom or a tellurium atom; and said aliphatic group can comprise at least one selected from the group consisting of an oxygen atom, a nitrogen atom, a sulfur atom, a silicon atom, a phosphorus atom and a boron atom,~~

the general formula (2):

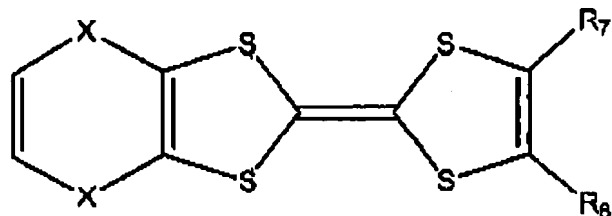


where R^3 , R^4 , R^5 and R^6 are independent of each other and each represents a linear or cyclic aliphatic group, a hydrogen atom, a hydroxyl group, a cyano group, an amino group, a nitro group or a nitroso group; and said aliphatic group can comprise at least one selected from the group consisting of an oxygen atom, a nitrogen atom, a sulfur atom, a silicon atom, a phosphorus atom, a boron atom and a halogen atom.

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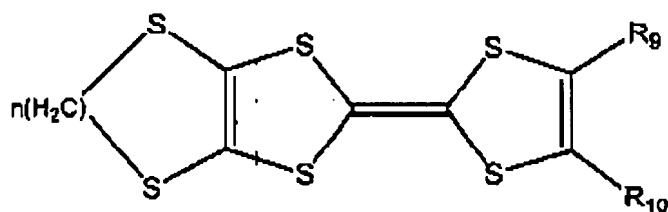


the general formula (3):



where R^7 and R^8 are independent of each other and each represents a linear or cyclic aliphatic group, a hydrogen atom, a hydroxyl group, a cyano group, an amino group, a nitro group or a nitroso group; X represents a sulfur atom, an oxygen atom, a selenium atom or a tellurium atom; and said aliphatic group can comprise at least one selected from the group consisting of an oxygen atom, a nitrogen atom, a sulfur atom, a silicon atom, a phosphorus atom, a boron atom and a halogen atom.

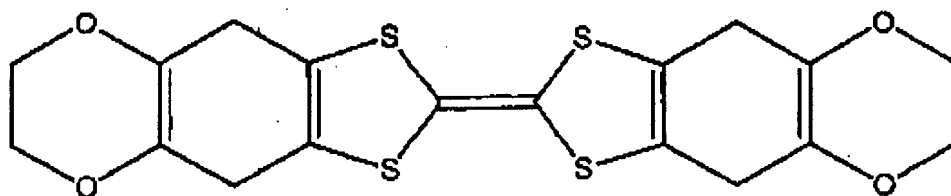
the general formula (5):



where R^9 and R^{10} are independent of each other and each represents a linear or cyclic aliphatic group, a hydrogen atom, a hydroxyl group, a cyano group, an amino group, a nitro group or a nitroso group; said aliphatic group can comprise at least one selected from the group consisting of an oxygen atom, a nitrogen atom, a sulfur atom, a silicon atom, a phosphorus atom, a boron atom and a halogen atom; and n is not less than 1, or

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the chemical formula (6):



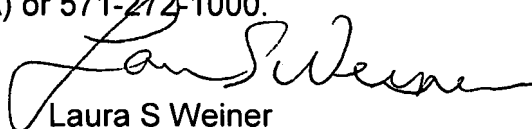
wherein said positive electrode includes said compound as a positive electrode active material; and said negative electrode includes, as a negative electrode active material, at least one selected from the group consisting of a lithium metal, a lithium-containing composite nitride and a lithium-containing composite titanium oxide.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura S. Weiner whose telephone number is 571-272-1294. The examiner can normally be reached on M-F (6:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Laura S Weiner
Primary Examiner
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July 23, 2007